What is claimed is:

1. A synthetic oligonucleotide having a nucleotide sequences specifically complementary to nucleotides 324 to 345 of a conserved *gag* region of the HIV-1 genome set forth as SEQ ID NO:5, the oligonucleotide consisting of 21 nucleotides which are linked via phosphorothioate internucleotide linkages.

2. The oligonucleotide of claim 1, wherein the nucleotides comprise at least two 3'-terminal ribonucleotides, at least two 5'-terminal ribonucleotides, or at least two 3'-terminal and at least two 5' terminal ribonucleotides.

3. The oligonucleotide of claim 2, wherein the ribonucleotides are 2'-substituted ribonucleotides.

4. The oligonucleotide of claim 3, wherein the 3'-substituted ribonucleotides are 2'-O-alkyl ribonucleotides.

5. The oligonucleotide of claim 4, wherein the ribonucleotides are 2'-O-methyl ribonucleotides.

6. The method of claim 2, wherein the nucleotides consist essentially of four 3'-terminal ribonucleotides and four 3'-terminal ribonucleotides, flanking 13 deoxynucleotides.

7. The oligonucleotide of claim 6, wherein the ribonucleotides are 2'-O-methyl ribonucleotides.

8. The oligonucleotide of claim 1 having SEQ ID NO:1.

9. The oligonucleotide of claim 1 having SEQ ID NO:3.

10. The oligonucleotide of claim 7 having SEQ ID NO:1.

11. The oligonucleotide of claim 7 having SEQ ID NO:3.

12. The oligonucleotide of claim 1 having SEQ ID NO:2.

13. The oligonucleotide of claim 1 having SEQ ID NO:4.

14. The oligonucleotide of claim 1 which inhibits HIV-1 or HIV-2 infection in a cell.

15. The oligonucleotide of claim 1 which exhibits antiviral activity against HIV-1 and HIV-2.

16. A method of treating HIV-1 or HIV-2 infection in a mammal, comprising the step of administering to the mammal a synthetic oligonucleotide in an amount effective to inhibit the proliferation of HIV-1 or HIV-2,

the oligonucleotide being specifically complementary to nucleotides 324 to 345 of a conserved *gag* region of the HIV-1 genome set forth as SEQ ID NO:5, and consisting of 21 nucleotides which are linked via phosphorothioate internucleotide linkages.

17. The method of claim 16 wherein the nucleotides of the oligonucleotide comprise at least two 3'-terminal ribonucleotides, at least two 5'-terminal ribonucleotides, or at least two 3'-terminal and at least two 5' terminal ribonucleotides.

18. The method of claim 17, wherein the ribonucleotides of the oligonucleotide are 2'-substituted ribonucleotides.

19. The method of claim 18, wherein the 3'-substituted ribonucleotides of the oligonucleotides are 2'-O-alkyl ribonucleotides.

20. The method of claim 19, wherein the ribonucleotides of the oligonucleotide are 2'-O-methyl ribonucleotides.

21. The method of claim 19, wherein the nucleotides of the oligonucleotide consist essentially of four 3'-terminal ribonucleotides and four 3'-terminal ribonucleotides, flanking 13 deoxynucleotides.

22. The method of claim 21, wherein the ribonucleotides of the oligonucleotide are 2'-O-methyl ribonucleotides.

23. The method of claim 16, wherein the oligonucleotide has SEQ ID NO:1.

24. The method of claim 16, wherein the oligonucleotide has SEQ ID NO:3.

25. The method of claim 21, wherein the oligonucleotide has SEQ ID NO:1.

26. The method of claim 21, wherein the oligonucleotide has SEQ ID NO:3.

27. The method of claim 16, wherein the oligonucleotide has SEQ ID NO:2.

28. The method of claim 16, wherein the oligonucleotide has SEQ ID NO:6.

29. The method of claim 16, wherein the oligonucleotide is administered orally.

30. The method of claim 16, wherein the oligonucleotide is administered intravenously.

31. A pharmaceutical formulation comprising the oligonucleotide of claim 1 in a pharmaceutically acceptable carrier.

32. A pharmaceutical formulation comprising the oligonucleotide of claim 6 in a pharmaceutically acceptable carrier.

33. A pharmaceutical formulation comprising the oligonucleotide of claim 7 in a pharmaceutically acceptable carrier.

34. A method of inhibiting HIV-1 or HIV-2 infection in a cell comprising the step of contacting the cell with the synthetic oligonucleotide of claim 1.

35. A method of inhibiting HIV-1 or HIV-2 infection in a cell comprising the step of contacting the cell with the synthetic oligonucleotide of claim 6.

36. A method of inhibiting HIV-1 or HIV-2 infection in a cell comprising the step of contacting the cell with the synthetic oligonucleotide of claim 7.

37. A method for introducing an intact oligonucleotide into a mammal, the method comprising the step of orally administering to the mammal the oligonucleotide of claim 1,

whereby the oligonucleotide is present in intact form in the systemic plasma following oral administration.

38. A method for introducing an intact oligonucleotide into a mammal, the method comprising the step of orally administering to the mammal the oligonucleotide of claim 6,

whereby the oligonucleotide is present in intact form in the systemic plasma following oral administration.

39. A method for introducing an intact oligonucleotide into a mammal, the method comprising the step of orally administering to the mammal the oligonucleotide of claim 7,

whereby the oligonucleotide is present in intact form in the systemic plasma following oral administration.